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(54) Title: BUPROPION METABOLITES AND METHODS OF THEIR SYNTHESIS AND USE

(57) Abstract: Methods and compositions are disclosed which utilize metabolites of bupropion for treating disorders ameliorated by inhibition of neuronal monoamine reuptake. Such disorders include, but are not limited to, erectile dysfunction, affective disorders, cerebral function disorders, cigarette smoking, and incontinence. The invention further discloses methods of making optically pure bupropion metabolites.

## INTERNATIONAL SEARCH REPORT

International application No.  
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## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 31/5375, 133, 137; C07C 49/76, 82, 807; 317/14; C07D 265/32

US CL : 514/239.5, 653, 649; 544/173; 568/31, 336

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 514/239.5, 653, 649; 544/173; 568/31, 336

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

STN

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	MUSSO et al. Synthesis and Evaluation of the Anticonvulsant Activity of a Series of 2-Amino-1-Phenyl-1-Propanols Derived from the Metabolites of the Antidepressant Bupropion. Bioorganic & Medicinal Chemistry Letters. 07 January 1997, Vol. 7, No. 1, pages 1-6, see entire document.	1-5, 20-25, 39-56
Y ---- A	KELLY et al. (2S 35, 5K)-2-(3,5-Difluorophenyl)-3,5-dimethyl-2-morpholinol: A Novel Antidepressant Agent and Selective Inhibitor of Norepinephrine Uptake. J. Med. Chem. 19 January 1996, Vol. 39, No. 2, pages 347-349, see entire document.	1-5, 13-19, 39-56 ----- 6-12, 20-38, 57

Further documents are listed in the continuation of Box C.

See patent family annex.

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*O* document referring to an oral disclosure, use, exhibition or other means		
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